

always the most conspicuous part, just as the blade of a leaf is its most prominent feature, and it is very generally regarded as the frond itself. The term frond, therefore, is generally used in that sense as well as in its own. But the objection to this is that in practice it does not express clearly enough the exact meaning intended. This is especially true when the term frond is used in descriptions of proportion, as for example, when it is said that a frond is six inches tall, meaning thereby the leafy portion only, and the length of the stalk is given separately at four inches, as if it was distinct from the frond, whereas the stalk is an essential part of the frond itself, which would be described better by saying that it was ten inches tall, thus including its footstalk and giving its true length. Then if the proportion of each part was wanted it could be given separately under special terms, and the sum of both would conform to the total of the whole."

"We may thus avoid all the ambiguity arising from the use of terms in a double sense by restricting the term frond to its legitimate definition, and employing special terms for the different parts of the frond itself. This method will prevail throughout the present work, and whenever the term frond is used it is to be understood as meaning the entire leaf, with or without a stalk. Whenever a stalk is present its presence will be recognized by the special term *stipe*, the equivalent of footstalk (Latin *stipes*, plural *stipites*), and the leafy portion will be called the *lamina* (plural *laminae*). Thus we shall have definitely fixed terms, with clearly defined limitations, no one of which can trespass upon the province of the other" (ex Mss. ined. 1881).—
GEORGE E. DAVENPORT, *Medford, Mass.*

DUPLICATION OF CONTRIBUTIONS.

To the Editors of the Botanical Gazette:—That European botanists may occasionally overlook contributions from laboratories on this side of the Atlantic if brought out in ephemeral or obscure journals is naturally to be expected. The American botanist, in turn, may be pardoned for similar mistakes, if not of too frequent occurrence, in regard to publications on the other side. The neglect of the literature bearing upon a distinctively American plant, to be found in the oldest and most widely known botanical journal in the country, is a fault not so easily condoned, however.

Dr. Homer Bowers published in the *BOTANICAL GAZETTE*¹ a thorough and accurate account of the morphology and life history of *Hydrastis Canadensis*, obtained by ten years of work upon the plant, under cultivation, and in its habitat in central Indiana.

Dr. Julius Pohl has recently duplicated this contribution in a manner which admits of no extenuation.² He worked upon a stock of material con-

¹ *BOT. GAZ.* 16:73. 1891.

² Botanische Mitteilung über *Hydrastis Canadensis*. *Bibliotheca Botanica* 29, 1894.

sisting of thirty plants grown from rhizomes taken from the soil during the previous year, four two-year-old seedlings and two seedlings (presumably in the first year of growth) and a few ill developed seeds, according to his own account, in the Botanic Institute at Marburg, May-June 1893. His article exhibits no reference to Dr. Bowers' splendid work, which he has repeated, and not always in an accurate manner, since his results are a most striking example of the faulty conclusions which may be obtained from material under abnormal conditions. Dr. Pohl deals also with the minute anatomy of the plant, and the three pages devoted to this subject may be considered as the only original portion of his paper. The sections devoted to the systematic position of the species, its drug extracts and their adulterations, may be compiled from the common text-books and technical dictionaries, and are furthermore notably incomplete.

It is, of course, safe to assume that Dr. Pohl was unaware of Bowers' work. His ignorance may be directly due to the fact that "the file of the *BOTANICAL GAZETTE* is not to be found in the Marburg Institute," but it is a logical outcome of the assumption that the boundaries of botanical science are identical with those of Germany. Our brethren across the water would do well to rid themselves of this erroneous idea, once more nearly true than at present. Their repeated disregard of outside literature will certainly do much to lessen the prestige of the German Institute.

The above criticisms apply with peculiar force to the editors of the *Bibliotheca Botanica*. This publication consists of a series of "Originalabhandlungen," and the long interval between issues would certainly allow the verification of the eligibility of any manuscript. A regard for the ethics of the science, and simple justice to their subscribers, demands no less.—D. T. MACDOUGAL, *State University of Minnesota*.